

IN THE CLAIMS:

Please amend claims 1 and 4-6, and add new claims 7-8 as follows:

1. (Currently Amended) A method of calculating the frequency of appearance of a keyword, using a first database in which information about a base sequence or an amino acid sequence is stored and a second database in which document data is stored, said method comprising:
 - a first text data extraction step for extracting first text data from said first database ~~based on~~ which contains a base sequence or an amino acid sequence of a gene or protein of interest inputted by a user;
 - an identifier extraction step for extracting an identifier identifying document data in said first text data from said extracted first text data which contains the base sequence or the amino acid sequence;
 - a second text data extraction step for extracting second text data from said second database ~~based on~~ which contains said extracted identifier; [[and]]
 - an appearance frequency calculation step for sequentially reading keywords from a keyword table containing keywords ~~related to~~ of known functions or characteristics of genes or proteins from said first database, and for calculating [[the]] a frequency of appearance of each of said keywords in said extracted second text data; and
 - a displaying step for displaying a frequency of appearance of each of said keywords in a corresponding position in said keyword table.
2. (Original) The keyword frequency calculating method according to claim 1, wherein said keyword table has a tree structure in which keywords are stored such that they are classified according to categories, and wherein said appearance frequency calculation step comprises a step for generating a frequency calculation result table of a tree structure, said table containing the frequency of appearance of a keyword and the frequency of appearance of an upper-level category to which the keyword belongs.
3. (Original) The keyword frequency calculating method according to claim 1, wherein said first text data extraction step comprises a step for extracting first text data from said first database for each of a plurality of sequences entered by the user.

4. (Currently Amended) A program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method ~~characterized by~~ of calculating the frequency of appearance of a keyword, using a first database in which information about a base sequence or an amino acid sequence is stored and a second database in which document data is stored, said ~~method~~ program comprising:
- a first text data extraction [[step]] module for extracting first text data from said first database ~~based on~~ which contains a base sequence or an amino acid sequence of a gene or protein of interest inputted by a user;
 - an identifier extraction [[step]] module for extracting an identifier identifying document data in said first text data from said extracted first text data which contains the base sequence or the amino acid sequence;
 - a second text data extraction [[step]] module for extracting second text data from said second database ~~based on~~ which contains said extracted identifier; [[and]]
 - an appearance frequency calculation [[step]] module for sequentially reading keywords from a keyword table containing keywords ~~related to~~ of known functions or characteristics of genes or proteins from said first database, and for calculating [[the]] a frequency of appearance of each of said keywords in said extracted second text data; and
 - a displaying module for displaying a frequency of appearance of each of said keywords in a corresponding position in said keyword table.
5. (Currently Amended) A program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method according to claim 4, further ~~characterized by~~ comprising a module for providing said keyword table having with a tree structure in which keywords are stored such that they are classified according to categories, and wherein said appearance frequency calculation module ~~step comprises a step for generating~~ generates a frequency calculation result table of a tree structure, said table containing the frequency of appearance of a keyword and the frequency of appearance of an upper-level category to which the keyword belongs.
6. (Currently Amended) A program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method according to claim 4, further ~~characterized by~~ wherein said first text data extraction module ~~step comprising~~

~~a step for extracting~~ extracts first text data from said first database for each of a plurality of sequences entered by the user.

7. (New) The keyword frequency calculating method according to claim 2, wherein a frequency of each category in the keyword table is the sum of frequencies of lower-level categories belonging to the category.
8. (New) A program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method according to claim 5, wherein a frequency of each category in the keyword table is the sum of frequencies of lower-level categories belonging to the category.